

Overview

VT90BK15 is Canyon's anti explosive decompression (AED) 90 shore A durometer, black FKM Type B. Other FKM types are also available: A, B, F, GF, GLT, GFLT, ULT, ETP. Compare to Parker V1238-95, V0709-90 and VA153-90.

Features & Benefits

- Passes NORSO M-710 AED testing
- FKM Type B
- Great heat resistance, high temp stability, & chemical resistance
- Excellent resistance to weathering, aging, and extrusion

Service Temperature

- -24°C to 225°C (-11°F to 437°F)

Specification

- ASTM D2000 M2HK910 A1-10 B37 B38 EF31 F15

Test Data

Table 1. Physical Properties

Test	Requirements	Results
Color	Black	Black
Hardness, Shore A	90+/-5	93
Tensile Strength, psi (MPa)	1450 min	3422 (23.6)
Elongation	100% min	120%



Table 2. A1-10 - Heat Aging - 70 hrs at 250°C

Test (Change)	Requirements	Results
Hardness, Shore A	+10 max	0
Tensile Strength, %	-25 max	-5
Elongation, %	-25 max	+15

Table 3. B37 - Compression Set - 22 hrs at 175°C

Test (Change)	Requirements	Results
Permanent Set, %	50 max	9

Table 4. B38 - Compression Set - 22 hrs at 200°C

Test (Change)	Requirements	Results
Permanent Set, %	50 max	10

Table 5. EF31 - ASTM Fuel C Resistance - 70 hrs at 23°C

Test (Change)	Requirements	Results
Hardness, Shore A	-5 to +5	-2
Tensile Strength, %	-25 max	-12
Elongation, %	-20 max	+1
Volume, %	-0 to +10	+3

VT90BK15 is now available on the Canyon Components [online store!](#)

Looking for specific chemical compatibilities or desire more material information? [Please Contact Us!](#)

Table 6. E078 – ASTM Oil 101 Resistance – 70 hrs at 200°C

Test (Change)	Requirements	Results
Hardness, Shore A	-15 to +5	-7
Tensile Strength, %	-40 max	-17
Elongation, %	-20 max	+6
Volume, %	0 to +15	+8

Table 7. ASTM Oil #3 (903) Resistance – 70 hrs at 175°C

Test (Change)	Requirements	Results
Hardness, Shore A	N/A	-2
Tensile Strength, %	N/A	-15
Elongation, %	N/A	-15
Volume, %	N/A	+2

Table 8. F15 – Low Temp Brittleness Test – 3 mins at -25°C

Test (Change)	Requirements	Results
Brittleness	Non-Brittle	Non-Brittle

Table 9. Low Temperature Performance

Test (Change)	Requirements	Results
TR-10, °C	N/A	-16

Table 10. NORSO M-710 Rapid Gas Decompression Resistance

Condition	Tolerances	Value
Test Temperature, °C	-2 to +2	100
Pressure, MPa	0 to +2	15
Cycle Count	N/A	8
Decompression Rate, MPa/min	N/A	2

Gas Type, mol%	N/A	90/10 CH4/CO2

Test (Change)	Requirements	Results
Hardness, Shore A	Pass	Pass (0000)